

REMARKS

The Office action mailed on 6 October 2003 (Paper No. 7) has been carefully considered.

The specification is being amended to correct minor errors and improve form. Claims 2, 12, 17, 18, 22, 23, 32, 35 thru 37, 39 thru 41, 43 and 45 thru 47 are being canceled without prejudice or disclaimer, claims 1, 3, 4, 6 thru 9, 13 thru 16, 19 thru 21, 24 thru 29, 31, 33, 34, 38, 42 and 44 are being amended, and new claims 48 and 49 are being added. Thus, claims 1, 3 thru 11, 13 thru 16, 19 thru 21, 24 thru 31, 33, 34, 38, 42, 44, 48 and 49 are pending in the application.

On page 2 of the Office action, the drawings were objected to for not showing the graphical user interface recited in claim 39. As stated above, claim 39 is being canceled without prejudice or disclaimer. Thus, the objection to the drawings no longer applies, and should be withdrawn.

On pages 2-3 of the Office action, the Examiner objected to claims 13, 14, 21 thru 25 and 45 because of various informalities pointed out by the Examiner. Accordingly, claims 13, 14 and 21 are being amended in accordance with the Examiner's comments, and claim 45 is being canceled without prejudice or disclaimer. Accordingly, the objection to the claims no longer applies, and should be withdrawn.

On page 3 of the Office action, the Examiner objected to claims 32 and 33 under 37 C.F.R. §1.75(c) as being of improper dependent form. In that regard, claim 32 is being canceled without prejudice or disclaimer, and claim 33 is being amended to depend from claim 26. Thus, dependent claim 33 should now be in proper dependent form, and the objection no longer applies, and should be withdrawn.

On pages 3-4 of the Office action, the Examiner rejected claims 34, 36 and 37 under 35 U.S.C. §103 for alleged unpatentability over Kunishi *et al.*, U.S. Patent No. 5,991,557 in view of Gilman *et al.*, U.S. Patent No. 6,208,770. On pages 4-7 of the Office action, the Examiner rejected claims 39 and 41 under 35 U.S.C. §103 for alleged unpatentability over Kunishi *et al.* '557 in view of Gilman *et al.* '770, Fukui *et al.*, U.S. Patent No. 5,719,613 and Hashimoto, U.S. Patent No. 6,088,548. On pages 7-9 of the Office action, the Examiner rejected claims 42 and 43 under 35 U.S.C. §103 for alleged unpatentability over Kunishi *et al.* '557 in view of Gilman *et al.* '770, Nishiuwatoko *et al.*, U.S. Patent No. 6,079,029 and Hashimoto '548. On pages 9-10 of the Office action, the Examiner rejected claim 38 under 35 U.S.C. §103 for alleged unpatentability over Kunishi *et al.* '557 in view of Gilman *et al.* '770, and further in view of Fukui *et al.* '613. On pages 10-11 of the Office action, the Examiner rejected claims 34, 35 and 37 under 35 U.S.C. §103 for alleged unpatentability over Yoshinaga *et al.*, U.S. Patent No. 5,666,589 in view of Chapman, U.S. Patent Publication No. 2002/0067498. On pages 12-14 of the

Office action, the Examiner rejected claims 39 and 40 under 35 U.S.C. §103 for alleged unpatentability over Yoshinaga *et al.* '589 in view of Chapman '498, Fukui *et al.* '613 and Hashimoto '548. On page 15 of the Office action, the Examiner rejected claim 38 under 35 U.S.C. §103 for alleged unpatentability over Yoshinaga *et al.* '589 in view of Chapman '498, and further in view of Fukui *et al.* '613. On pages 15-17 of the Office action, the Examiner rejected claims 1, 5, 7, 8, 13, 15, 16, 18, 21, 23, 26, 28, 30, 32, 42, 46 and 47 under 35 U.S.C. §103 for alleged unpatentability over Yoshinaga *et al.* '589 in view of Chapman '498, Hashimoto '548 and Nishiuwatoko *et al.* '029. On page 18 of the Office action, the Examiner rejected claim 3 under 35 U.S.C. §103 for alleged unpatentability over Yoshinaga *et al.* '589 in view of Chapman '498, Hashimoto '548 and Nishiuwatoko *et al.* '029, and further in view of Kajiwara *et al.*, U.S. Patent No. 6,339,476. On pages 18-19 of the Office action, the Examiner rejected claims 25, 27, 29, 31 and 33 under 35 U.S.C. §103 for alleged unpatentability over Yoshinaga *et al.* '589 in view of Chapman '498, Hashimoto '548 and Nishiuwatoko *et al.* '029, and further in view of Fukui *et al.* '613. On pages 20-21 of the Office action, the Examiner rejected claims 8 thru 11, 13, 15, 21 thru 23 and 28 under 35 U.S.C. §103 for alleged unpatentability over Kunishi *et al.* '557 in view of Gilman *et al.* '770, Nishiuwatoko *et al.* '029 and Hashimoto '548. On pages 21-22 of the Office action, the Examiner rejected claims 25 and 29 under 35 U.S.C. §103 for alleged unpatentability over Kunishi *et al.* '557 in view of Gilman *et al.* '770, Nishiuwatoko *et al.* '029 and Hashimoto '548, and further in view of Fukui *et al.* '613. on page 23 of the Office action, claims 2, 4, 6, 12, 14, 17, 19, 20, 24 and 44 were objected to

for dependency upon a rejected base claim, but the Examiner stated that they would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Independent method claim 1 is being amended to include the recitation of dependent claim 2, which is being canceled. Since the Examiner merely objected to dependent claim 2 for dependency upon a rejected base claim, independent claim 1 and associated dependent claims 3 thru 5, 7, 26, 27 and 33 should now be in condition for allowance.

Dependent claim 6 (which is dependent from claims 1 and 5) is being amended to appear in independent form, including the recitations from independent claim 1. The recitations from intervening dependent claim 5 are not being literally included in the amendment of claim 6, but are inherent in the recitations of amended claim 6. Therefore, in view of the Examiner's indication of allowable subject matter in original dependent claim 6, amended claim 6 should now be in condition for allowance.

Independent method claim 8 is being amended to include the recitation of dependent claim 12, which is being canceled. Since the Examiner indicated that dependent claim 12 recited allowable subject matter, independent claim 8 and associated dependent claims 9 thru 11, 13, 15, 28 and 29 should now be in condition for allowance.

Dependent claim 14 is being amended to appear in independent form, including the recitations from independent claim 8. Since the Examiner indicated that intervening dependent claim 13 was rejected under 35 U.S.C. §103, it is considered that the recitation of dependent claim 13 is not necessary or critical to patentability of independent claim 14. Therefore, the recitations of intervening dependent claim 13 have not been included in the amendment of claim 14, but it is submitted that amended claim 14 recites the invention in a manner distinguishable from the prior art, especially in view of the Examiner's indication that original dependent claim 14 recited patentable subject matter. Therefore, amended claim 14 should now be in condition for allowance.

Independent apparatus claim 16 is being amended to include the recitation from dependent claim 17, which is being canceled. Since the Examiner indicated that dependent claim 17 recited allowable subject matter, independent claim 16 and associated dependent claims 19, 20, 30 and 31 should now be in condition for allowance.

Independent method claim 21 is being amended to include the recitation from dependent claim 22, which is being canceled. Thus, independent claim 21 now recites that the power supply unit selectively charges the charge roller with a charge voltage that is relatively high in magnitude when the selected print mode is text mode, and which is relatively low in magnitude when the selected print mode is graphics mode. It should be noted that the latter recitation is merely a more general expression of the limitation

recited in allowable dependent claim 24, without reciting specific direct current (DC) voltages for the charge voltage when the print mode selected is text mode or graphics mode, respectively. For this reason alone, independent claim 21 should now be in condition for allowance.

However, it should also be noted that the only “prior art” rejection of dependent claim 22 (now incorporated into independent claim 21 by amendment) was a rejection under 35 U.S.C. §103 based on Kunishi *et al.* '557 in view of Gilman *et al.* '770, Nishiuwatoko *et al.* '029 and Hashimoto '548, as set forth on pages 20 and 21 of the Office action. With respect to the latter rejection, it is further noted that, in rejecting dependent claim 22 under 35 U.S.C. §103 based on the latter references, the Examiner did not allege that any of the references discloses or suggests the specific limitation now added to independent claim 21 by amendment. That is to say, the Examiner did not point to any portion of any of the four cited references as disclosing the application, to a charge roller, of a **charge voltage** which is relatively high in magnitude when the selected print mode is text mode, and which is relatively low in magnitude when the selected print mode is graphics mode. Thus, for this additional reason, it is submitted that independent claim 21 and associated dependent claims 24 and 25 should now be in condition for allowance.

Independent claim 42 is being amended to include the recitations of dependent

claim 43, while new independent claim 48 is a combination of the recitations of independent claim 34 and the recitations of either dependent claim 22 or dependent claim 43. Thus, independent claims 42 and 48 recite the same limitation as now added to independent claim 21, and discussed above, that is, the recitation of the application, to a charge roller, of a charge voltage which is relatively high in magnitude when the selected print mode is text mode, and which is relatively low in magnitude when the selected print mode is graphics mode. Thus, the arguments set forth above relative to amended independent claim 21 apply to independent claims 42 and 48, and on that basis, independent claim 42 and associated dependent claim 44, as well as independent claim 48 and associated dependent claim 49 should be in condition for allowance.

Independent claim 34 is being amended to include the recitation that, when the type of print job is a resolution of the print job, the magnitude of voltage to which the charge roller is charged is greater for a lower resolution and smaller for a higher resolution. The latter recitation is almost identical to the recitations of dependent claims 2, 14 or 17. Since the Examiner indicated that the recitations of dependent claims 2, 14 or 17 constituted allowable subject matter, independent claim 34 and associated dependent claim 38 should now be in condition for allowance on the same basis.

Finally, with respect to claims 21, 34, 42 and 48, in the paragraphs bridging pages 3 and 4 of the Office action, the Examiner does cite Kunishi *et al.* '557 as allegedly


disclosing an apparatus having two modes of printing, a character mode which uses a low tone reproductivity and a photograph mode which uses a higher tone reproductivity. The Examiner further alleges that the charging bias voltage varies according to which mode is selected, stating that the frequency of the voltage of the first mode is lower than that of the second mode. The Examiner cites the Abstract of the patent; as well as column 3, line 60 - column 5, line 22 and column 12, lines 1-42 of the patent. However, those citations do not disclose or suggest the claimed invention.

Specifically, the invention does not involve the provision of a charging voltage having a variable frequency, that is, a frequency which varies in a first mode and in a second mode, respectively. Rather, the invention relates to the selection between a text mode and a graphics mode, wherein the magnitude of the voltage to which the charge roller is charged is greater for the text mode and smaller for the graphics mode. Neither Kunishi *et al.* '557 nor any of the other references discloses or suggests the latter feature of the present invention, as claimed.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

A fee of \$172.00 is incurred by the addition of two (2) independent claims in excess of total 7. Also, a fee of \$110.00 is incurred by filing of a petition for one-month extension of time. Applicant's check drawn to the order of the Commissioner accompanies this Amendment. Should the check become lost or detached from the file, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees and advise the undersigned attorney accordingly. Also, should the enclosed check be deemed to be deficient or excessive in payment, the Commissioner is authorized to charge or credit our deposit account and notify the undersigned attorney of any such transaction.

Respectfully submitted,


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